

WHAT IS CLAIMED IS:

1. A liquid degassing system comprising:

a degassing device for removing air dissolved in a liquid by feeding the liquid thereinto, degassing the liquid, and discharging the liquid therefrom;

a detecting device for detecting an amount of air dissolved in at least one of a liquid which is to be fed to the degassing device and a liquid which has been discharged from the degassing device;

a degassing regulating unit for regulating an amount of dissolved air degassed by the degassing device; and

a control unit for controlling the degassing regulating unit, based on detection results obtained by the detecting device, thereby regulating a degree of degassing performed by the degassing device.

2. The liquid degassing system according to claim 1, wherein the degassing device is equipped with a pipe for connecting the degassing device with a vacuum pump, and the degassing regulating unit is a pressure reducing/regulating valve installed in the pipe.

3. The liquid degassing system according to claim 1, wherein the degassing device is equipped with a pipe for connecting the degassing device with a vacuum pump, the degassing regulating unit is a pressure reducing/regulating valve installed in the pipe, and the control unit controls a degree of opening of the pressure reducing/regulating valve.

4. The liquid degassing system according to claim 1, wherein the detecting device detects the amount of air dissolved in both the liquid which is to be fed to the degassing device and the liquid which has been discharged from the degassing

device.

5. The liquid degassing system according to claim 1, wherein the liquid is a water-based coating liquid, and the detecting device detects the amount of air dissolved in the liquid which has been discharged from the degassing device.

6. The liquid degassing system according to claim 1, wherein the degassing device is equipped with a degassing film.

7. The liquid degassing system according to claim 1, wherein the liquid is a coating liquid to be applied on a web of a photosensitive planographic printing precursor.

8. A liquid degassing system comprising:

a group of degassing devices arranged in rows, each of the group of degassing devices having a liquid providing flow path for providing thereto a liquid which is to be degassed and a liquid discharge flow path for discharging therefrom a liquid which has been degassed;

a detecting device for detecting an amount of air dissolved in at least one of the liquid which is to be fed to the group of degassing devices and the liquid which has been discharged from the group of degassing devices;

a switching device for switching providing the liquid to at least one degassing device from among the group of degassing devices; and

a control unit for operating the switching device based on detection results obtained by the detecting device, thereby providing the liquid to at least one degassing device selected by the switching device.

9. The liquid degassing system according to claim 8, wherein the switching device is equipped with open-close valves for the respective liquid providing flow paths, and the control unit operates opening and closing of the open-close valves.

10. The liquid degassing system according to claim 8, wherein the group of degassing devices shares a common liquid providing flow path and a common liquid discharge flow path, the respective liquid providing flow paths of the group of degassing devices diverge from the common liquid providing flow path, and the respective liquid discharge flow paths of the group of degassing devices converge into the common liquid discharge flow path.

11. The liquid degassing system according to claim 8, wherein each of the group of degassing devices is equipped with a pipe for connecting each of the degassing devices with a vacuum pump, and the switching device is a open-close valve installed in the pipe.

12. The liquid degassing system according to claim 8, wherein each of the group of degassing devices is equipped with a pipe for connecting each of the group of degassing devices with a vacuum pump, the switching device is a open-close valve installed in the pipe, and the control unit controls opening and closing of the open-close valve.

13. The liquid degassing system according to claim 8, wherein the detecting device detects the amount of air dissolved in both the liquid which is to be fed to the group of degassing devices and the liquid which has been discharged from the group of degassing devices.

14. The liquid degassing system according to claim 8, wherein the liquid is a water-based coating liquid, and the detecting device detects the amount of air dissolved in the liquid which has been discharged from the group of degassing devices.

15. The liquid degassing system according to claim 8, wherein at least one of the group of degassing devices has a degassing film.

16. The liquid degassing system according to claim 8, wherein the liquid is a coating liquid to be applied on a photosensitive planographic printing precursor.

17. The liquid degassing system according to claim 8, wherein at least two of the group of degassing devices are arranged in series so that the liquid discharge flow path of one of the at least two degassing devices can be connected with the liquid providing flow path of another of the at least two degassing devices, the switching device is equipped with a branch path which bypasses one of the at least two degassing devices, and the branch path and the liquid providing flow path of one of the at least two degassing devices are disposed in such a way that one of the two paths can be selected.

18. A liquid degassing method for degassing air dissolved in a liquid which is to be coated on a web, the method comprising:

preparing a degassing device;

feeding a liquid to the degassing device and discharging the liquid therefrom;

detecting an amount of air dissolved in at least one of the liquid which is to be fed to the degassing device and the liquid which has been discharged from the degassing device; and

regulating a degree of degassing performed by the degassing device, based on detection results.

19. The liquid degassing method according to claim 18 further comprising detecting an amounts of air dissolved in both the liquid which is to be fed to the degassing device and the liquid which has been discharged from the degassing device.

20. The liquid degassing method according to claim 18 further comprising detecting an amount of air dissolved in the liquid which has been discharged from the degassing device, the liquid being a water-based coating liquid.